# IPC-CB2C20M-ZS
## 2MP IR Mini-Bullet Network Camera

· 1/2.7" 2Megapixel progressive CMOS
· H.265+ & H.265 dual-stream encoding
· 25/30fps@1080P(1920×1080)
· DWDR, Day/Night(ICR), 3DNR, AWB, AGC, BLC
· Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
· 2.8~12mm varifocal lens
· Max IR LEDs Length 40m
· Micro SD card memory, IP67, IK10(Optional), PoE

2Mp    H. 265+    40 mIR    IP67

## System Overview

The IR Megapixel Vari-focal camera delivers 2MP/4MP resolution with a 2.8mm ~ 12mm  varifocal lens.The camera's elegant blend of aesthetics combined with a range of easy mounting solutions provides an excellent choice for a variety of small to mid-size applications at an affordable price.

## Functions

### Smart Codec (H.265+ & H.264+)
Smart Codec is the optimized implementation of standard video compression (H.265 & H.264) that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart Codec technology reduces bit rate and storage requirements by up to 70% when compared to the standard video compression.

### True Day/Night
A day/night mechanical IR cut filter makes this camera ideal for applications with fluctuating lighting conditions, delivering color images during the day and automatically switching to monochrome as the scene darkens

### Regions of interest
Regions of Interest (ROI) is a user defined feature that allows the operator to monitor specific areas of a scene while still maintaining overall situational awareness of less important areas

### Smart IR
With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object. Smart IR technology prevents IR LEDS from whiting out images as they come closer to the camera. The camera's integrated infrared illumination

provides high performance in extreme low-light environments up to 40m (131ft).

### Image flip
Capturing unnecessary data such as surrounding hallway walls can increase storage requirements without any added value. The image flip feature allows the camera's image to be rotated in 90° increments for better video optimization.

### Environmental
Dahua cameras operate in extreme temperature environments, rated for use in  temperatures from -30° C to +60° C (-22° F to +140° F) with 95% humidity.

### Protection (IP67, wide voltage)
The camera allows for ±25% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 2KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) .

### Interoperability
The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer

ONVIF

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/2.7" 2Megapixel progresive CMOS |
| Effective Pixels | 1920(H)x1080(V) |
| RAM/ROM | 64MB/16MB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual, 1/3~1/100000s |
| Minimum Illumination | 0.05Lux/F1.8( Color,1/3s,30IRE)<br>0.3Lux/F1.8( Color,1/30s,30IRE)<br>0Lux/F1.8(IR on) |
| S/N Ratio | More than 50dB |
| IR Distance | Distance up to 40m(131ft) |
| IR On/Off Control | Auto/ Manual |
| IR LEDs | 2 |

### Lens

| | |
|---|---|
| Lens Type | Motorized |
| Mount Type | Board-in |
| Focal Length | 2.8mm~12mm |
| Max. Aperture | F1.8 |
| Angle of View | H:105°~33°, V:56°~18° |
| Focus Control | Motorized |
| Close Focus Distance | 0.2m(0.66ft) |

| | Lens | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|---|
| DORI Distance | W | 44m(144.4ft) | 17.6m(57.7ft) | 8.8m(28.9ft) | 4.4m(14.4ft) |
| | T | 133m(436.4ft) | 53m(173.9ft) | 27m(88.6ft) | 13m(42.7ft) |

### PTZ

| | |
|---|---|
| Pan/Tilt Range | Pan:0° ~360° ;Tilt:0° ~90° ;Rotation:0° ~360° |

### Intelligence

| | |
|---|---|
| Event Trigger | Motion detection, Video tampering , Network disconnection , Scene change, IP address conflict, Illegal Access,Storage anomaly |

### Video

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|---|---|
| Compression | H.265/H.264/H.264B/MJPEG(Sub Stream) |
| Smart Codec | Support H.265+/H.264+ |
| Streaming Capability | 2 Streams |
| Resolution | 1080P(1920×1080)/1.3M(1280×960)/720P(1280×720)/VGA(640×480)/D1(704×576/704×480)/CIF(352×288/352×240) |
| Frame Rate | Main Stream: 1080P(1 ~ 25/30fps) |
| | Sub Stream: D1(1 ~ 25/30fps) |
| Bit Rate Control | CBR/VBR |
| Bit Rate | H.264: 16K~6144K<br>H.265: 6K~ 6144K |
| Day/Night | Auto(ICR) / Color / B/W |

| | |
|---|---|
| BLC Mode | BLC / HLC / DWDR |
| White Balance | Auto/Natural/Street Lamp/Outdoor/Manual |
| Gain Control | Auto/Manual |
| Noise Reduction | 3D DNR |
| Motion Detetion | Off / On (4 Zone, Rectangle) |
| Region of Interest | Off / On (4 Zone) |
| Electronic Image Stabilization (EIS) | N/A |
| Smart IR | Support |
| Digital Zoom | 16x |
| Flip | 0°/90°/180°/270° |
| Mirror | Off / On |
| Privacy Masking | Off / On (4 Area, Rectangle) |

### Audio

| | |
|---|---|
| Compression | N/A |

### Network

| | |
|---|---|
| Ethernet | RJ-45 (10/100Base-T) |
| Protocol | HTTP;HTTPS;TCP;ARP;RTSP;RTP;RTCP;UDP;SMTP;FTP;DHCP;DNS;DDNS;PPPoE;IPV4/V6;QoS;UPnP;NTP;Bonjour;IEEE 802.1X;Multicast;ICMP;IGMP;TLS;SSH |
| Interoperability | ONVIF Profile S&G, API |
| Streaming Method | Unicast / Multicast |
| Max. User Access | 10 Users/20 Users |
| Edge Storage | NAS(Network Attached Storage)<br>Local PC for instant recording<br>Micro SD Card 128GB |
| Web Viewer | IE, Chrome, Firefox, Safari |
| Management Software | Smart PSS, DSS,DMSS |
| Smart Phone | IOS, Android |

### Certifications

| | |
|---|---|
| Certifications | CE: (EN 60950:2000)<br>FCC: FCC Part 15 Subpart B |

### Interface

| | |
|---|---|
| Video Interface | N/A |
| Audio Interface | N/A |
| RS485 | N/A |
| Alarm | N/A |

### Electrical

| | |
|---|---|
| Power Supply | DC12V, PoE (802.3af)(Class 0) |
| Power Consumption | DC12V: 1.8W, 2.1W(IR On)<br>PoE: 5.8W, 6.7W(IR On) |

## Environmental

| | |
|---|---|
| Operating Conditions | -30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH |
| Strorage Conditions | -30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH |
| Ingress Protection | IP67 |
| Vandal Resistance | IK10(Optional) |

## Construction

| | |
|---|---|
| Casing | Metal |
| Dimensions | 244.1mm×79mm×75.9mm (9.61"×3.11"×2.99") |
| Net Weight | 0.85Kg(1.87lb) |
| Gross Weight | 1.06Kg(2.34lb) |

## Ordering Information

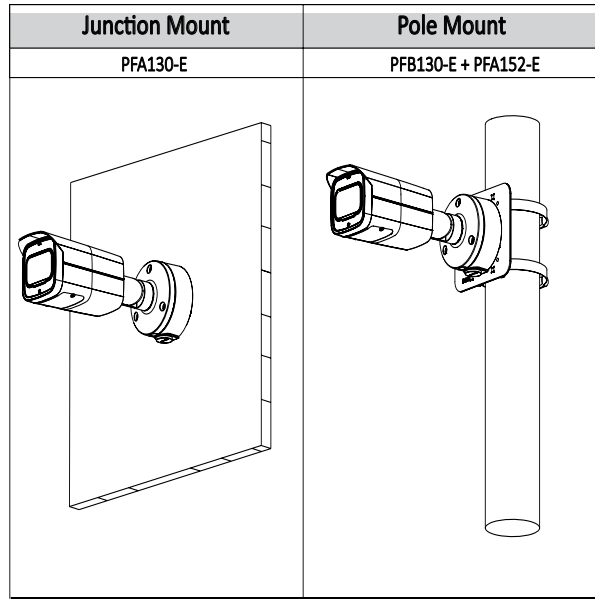| Type | Part Number | Description |
|---|---|---|
| 2MP Camera | IPC-CB2C20MP-ZS | 2MP IR Mini-Bullet Network Camera, PAL |
| | IPC-CB2C20MN-ZS | 2MP IR Mini-Bullet Network Camera, NTSC |
| Accessories (optional) | PFA130-E | Junction box |
| | PFA152-E | Pole mount |

## Accessories

**Optional:**



PFA130-E
Junction Box

PFA152-E
Pole mount

| Junction Mount | Pole Mount |
|---|---|
| PFA130-E | PFB130-E + PFA152-E |



## Dimensions (mm/inch)



244.1 [9.61"]
153.1 [6.03"]
79.0 [3.11"]
75.9 [2.99"]